

## **Session Summary, Environmental Windows Workshop**

By Mr. Thomas Wakeman, Port Authority of New York and New Jersey

Thank you, Ellen. Ellen speaks very vigorously about her position with industry and the need for dredging to go on and projects to be done.

I assure you there are advocates on the other side who speak just as vigorously about fisheries, the loss of resources, decline of our environment, and the need to do things differently.

The west coast is really under the influence of the Endangered Species Act, which is an act that protects individuals from take. There are a number of species in the bay area that are classified as endangered species or are on the list as threatened. The same thing goes for the Columbia River and the Puget Sound.

A different act is the Essential Fish Habitat Act which came in 1977, which says rather than protecting individuals, we will protect their habitat. Because without an apartment house, there's no place for these critters to live.

The difference between the two is you don't have to have any fish there to protect the habitat. And the National Marine Fisheries Service (NMFS) had the responsibility of going through and identifying all the critical fish habitat and all of the coastal estuaries and coastal resources.

How that is playing out is those are advisory recommendations to Federal agencies. However as Neville said, the project can be done. It can be through the Federal process. A permit application must be filed with the Federal government and will go out on public notice. To get the permit, you have to get a Water Quality Certificate from the states that that operation occurs in.

The states can see the NMFS recommendations, the conservation recommendations from the national agencies, and they can say, I am going to put a restriction on your Water Quality Certificate to protect the resources that the National Marine Fisheries Service says must be protected.

And if they don't do these things, particularly if you happen to be between two states, one which does and one which doesn't, let me tell you the next time around, both of them will have to deal with the ridicule of not protecting the resources for their state.

I'd like to go through one last presentation. I apologize for this, but I'm trying in ten minutes to talk a little bit about the negotiations. And in the world of dredging right now a lot of this is about getting the right people to the table and negotiating. As long as those people don't retire or turn over or something else, you can generally pool those agreements.

Unfortunately people like Frank McDonough moved on to new positions, and the agreements we put in place at the end of our navigation study-- what we call our 50 foot study, and the agreements to help others understand the impacts of that have not been acted on because Frank left for a new job. The person who happened to be the head for the Corps district left and went to another job. I was moved on to another job. And a new set of characters came in and it didn't turn out the same way, and a lot of people now have credibility issues around that.

This is about trying to do the right thing. And I think all of us are environmentalists, and we're all trying to do the right thing. So, how do you get win/win strategies?

In New York, unlike other parts of the country, we didn't have to worry about endangered species because we killed them all before the act was passed. Our problem now is they're coming back.

At the same time we have a 300 year old port, which actually had its last improvement in infrastructure in the mid '70s, first generation of containerization. It is now at the backside of the wave of the third generation and trying to move into that next century. This century now.

The 50 foot harbor feeds seven different regions in the port. There are two 41 foot projects underway right now, one at Port Jersey, and one at Arthur Kill. There is a 45 foot project through the Kill Van Kull and up into Newark Bay, plus, we have an authorized 50 foot improvement project.

It seemed ridiculous to be doing all of these in a sequential order. Instead let's see if we can do some of this work together. The ongoing project in the Kill Van Kull and Newark Bay to 45 feet is about 60 percent done.

At Bergen Point is the latest contract. That contract is mainly in rock. The area 4 was being drilled and blasted, and the residents in Staten Island and Bayonne were getting very aggravated with hearing that noise repeatedly.

So here this area is going to be drilled and blasted to 45. And at some point in the future will be drilled and blasted to 50. Why not do it as a piggyback? On the back of the Corps' project go from 45 down to 50. That has to be done as a permit action. We had a public hearing. In general it's the first public hearing I've been to in the metropolitan region where there were more people speaking in favor of the project than opposed to it. It was a very pleasant public hearing compared to a lot of the other ones I have been to.

The concept is very simple. There is an existing channel of 40 feet. The Corps is going to 45. We'll do a permit action, put up about -- well, I won't tell you the numbers -- and go down to 50. Do it all at the same time, save the citizens the impacts of noise.

Now, we knew there were existing windows. But at this point similar to what Ellen was talking about, some of these windows were already in place when we recognized that they could possibly influence the project. They were not influencing the 45 foot project because that was grandfathered. They would influence our 50 foot project because this is new work.

So, we got a letter back from National Marine Fisheries Service that said, no drilling or blasting from the Bayonne Bridge, which is essentially the green line right there west from essentially March to June.

This now takes our project and extends it another year. So, the drilling and blasting is going to go on more because of our permit action. So, the fact that these agencies really are not interested in stopping jobs, they do want to protect the resource. And the winter flounder is a resource that uses the tidal flats off to this area and off to this area and, in fact, in this area as well.

We look for ways to find the greater economic, environmental, and social benefits. They understood that if they came out and said absolutely not, that this blasting can't go on, then the residents of Staten Island and Bayonne are going to go why are you guys doing this to us? You know, we recognize the fish are important, but so are we.

So, we worked to find some trade-offs. So, we accepted that they wanted an area about 500 feet off of the flats to protect the fish. When you put the windows that we're talking about here, and the windows we're talking about up there together and the new contract is going to be here, we're back to there's no place to go for about four or five months a year.

Now, the question is should we go back to what was, continue to do the 45s and 41s as they were, subject the region to this construction over about the next 15 years, or should we go ahead and accept the fact that we've got some windows and figure out how we deal with them?

And the way we're dealing with it is by seeing if indeed the dredge material when excavated in this region is moving into the flats and possibly influencing the habitat.

Why do I say habitat versus species? Because there aren't any winter flounder here. Two years' worth of sampling by the Corps, all they found were three eggs.

So, we're going to do this, and that's our approach. We're starting at that end because earlier there had been a similar job down there at Arthur Kill here where the windows were put on for seven months.

You can't do anything different than maintenance work, which is routine short periods of time every year, and you can move around in the year. Generally if you've

noticed the windows are December, January, February. That's when you can dredge; the winter period when nothing is going on, the lakes are frozen, so forth and so on.

The rest of the year you have active biological populations. So, what we're trying to do is figure out how do you take care of both. What we're proposing is there is synergy to be found somewhere in here.

Navigation projects are the projects the Corps of Engineers is trying to put in place. They tie very critically toward our port projects. The investments are driving the investors on this side of the bulkhead, and they're all about \$5 billion over the next ten years.

But they have to be dovetailed with the environmental considerations because the environmental community said point blank we're not going to allow you to invest in the economic development of this port if you don't likewise make an economic investment in the resources of this region. In other words, the estuary's resources.

So, the Corps of Engineers now has the Hudson Raritan Restoration Study, which goes hand and glove with the USEPA Comprehensive Conservation and Management Plan and what the goals are there. And the Port Authority put up \$60 million to buy 6 pieces of property to do restoration. So we now have elements of navigation improvements, port development, and environmental restoration that are underway. If you put the three together, you get synergy and what we call a world-class harbor-estuary.

In closing, to get a world-class harbor-estuary, there must be knowledgeable people that work together to find ways to simultaneously achieve development and environmental protection.

## Environmental Windows Workshop Discussion

Environmental Windows Workshop Session Summary: Remarks by Mr. Dominic Izzo,  
Principal Deputy Assistant Secretary of the Army (Civil Works)

MR. IZZO: Actually I didn't have any formal comments, but I was so inspired by the presentations this morning, I just wanted a few words.

First of all, it's absolutely delightful to be here and see a bunch of engineers and scientists talking instead of trying to go through these concepts in the rarefied political atmosphere of Washington, where it really does get very difficult and people get very, very emotional. So, I really commend you for getting together and trying to discuss these things in a factual way. It's really a pleasure to be here.

And I have to make a confession to you all. Not only am I a coastal engineer who has actually studied hydrodynamics and sediment transport, which probably makes me really out on the fringe, but I'm also a dedicated hook and bullet conservationist. I used to think I was an environmentalist, but after going into the Everglades and meeting the true environmentalists, I know that I am really a hook and bullet conservationist.

So, I'm delighted to see presentations on the Pacific Northwest's salmon and flounder. I share your frustration with New York Harbor because I grew up on the banks of the beautiful Passaic River, which as you may or may not know is just north of that area where they're doing all the dredging, and is I believe the super fund site because of the chemicals and so forth that have been put in there over the years.

But I didn't want to get into all that. While I was sitting there, I was just thinking that this reinforces my feeling that the Corps is on the right track. And the Corps is really, for a military organization, very, very open. And they are pushing the collaborative planning process and partnering with all different types of folks. I was fascinated to find out that of the 35,000 corps employees, 1,251 are now biologists. And I submit to you that shows an organization that has changed quite a bit since we started dredging back in the late 19th century.

But we're really moving on this collaborative track. And the Army and the bureaucracy that is the Corps of Engineers is going to a watershed based planning methodology that is also collaborative and brings in all these other Federal agencies as well as concerned groups and industries and so forth.

That's what we've done down in the Everglades to produce a comprehensive Everglades Restoration Plan. And it really is amazing. It was very painful I'm sure. They've been working on it for over ten years, but it brought together the diverse groups in southern Florida, and it actually reached a consensus on how to go forward and save

the Everglades and oh, by the way, still provide flood protection and water supply for future growth.

And I personally think it's a triumph of policy down there in Florida. And what we would like to do is to see that expand into other areas such as San Francisco Bay, the Pacific Northwest and so forth.

And what it requires is for folks to invest a lot of time to exchange information, to find out where the truth is, and then you can actually come up with a plan that not only saves the flounder and the salmon, but also saves the navigation industry and our prosperity.

Because I will tell you, having worked overseas for about ten years in some very desperate places, that if you want to see true environmental wellbeing, you come to prosperous countries, and we're the most prosperous country. And I guarantee you you'll not find a better environmental climate anywhere, nor will you find better fish and wildlife.

So, I think we're on the right track, and I wanted to say that to y'all. I'll have more remarks this afternoon. I did want to also point out, because if you listen to all these discussions too long, you'll think we haven't made a lot of progress.

Like I said, I grew up on the banks of the Passaic River. And I remember driving from south Jersey crossing the Perth Amboy Bridge and coughing because the pollution from the refineries was so bad that it choked you. That's all gone now. It's pretty good. Much as L.A. has improved dramatically since I went to grad school there in 1980.

And I can tell you if you don't know that in the 1990's we saw wonderful growth in waterfowl in this country, nice rebound in populations. And if you think about it, I don't believe there is an endangered species of waterfowl in the lower 48 states, even though there are something like half a million of dedicated hunters who go out every year and try to kill them. So, that tells you that we can be very successful.

I also note that this year we had our first fishing season for salmon species on the Columbia in many years. So, when you're listening to all these discussions, and you get very frustrated and you think that maybe the world is going to be over tomorrow or your kid will never be able to go fishing or that the navigation industry is going to crash, I don't think that's going to happen. I'm an optimist. I think the economy will continue to grow, and I think we'll have fish and wildlife there for our children and our children's children as long as we keep working together.

And you really did a lot for me this morning, just listening to all this discussion. Please keep up the good work. Thank you.

MR. WAKEMAN: Do members of our panel want to say anything? Jerry.

MR. SCHUBEL: I want to reinforce something that a number of people have said, and Sye simply reminded me at the break. In all of this adaptive management, while it's been implicit, we need to make it explicit.

Because if we have this kind of a process, it really ought to be adaptive management. Every time you set a window, it ought to be an experiment. An experiment that you revisit at the end of the season, and you ask yourself whether it should be expanded or compressed.

The other thing we're talking about is books to read. John King, a political scientist at the University of Michigan years ago, wrote a wonderful book. It was about decisionmaking. In that book he described the governance model that he felt characterized the government at all levels. And it was called, "The Garbage Can Model of Governance".

And it's perfect because in the garbage can you have three streams that flow independently: problems, policies, and politics. And the trick is, because they each have their own watershed, they each have their own channel, the trick is to see if you can orchestrate them to come together.

Because it's only when those streams intersect that you can make changes in the way we do business. And again, it's getting people to the table, keeping them there, having them listen to the discussions. That's our only hope to orchestrate getting these streams to intersect. And then in that window when they come together, that's when you make changes in how we do business. And I think you're on the right track.

MR. WAKEMAN: Anybody in the audience would like to say something, burning to say something?

TODD BRIDGES: I've seen the academy process a couple of times in presentations only. I've not read the book yet. And I've made this comment before. There is a lot of parallel between what's being proposed here, and what I understand as environmental risk assessment, from the standpoint of how chemical contamination and impacts associated with that are evaluated.

And I'd like to strongly encourage that if there is another go round with the national academy or there's a reiteration for building on that process, that a close look be given to what has been done in developing an analysis framework for environmental risk assessment. I think it has a lot to offer, particularly when you're trying to infuse this with what people have been calling sound science.

Because in my mind it's not sound science until you generate tests for hypotheses. And that's going to require developing detailed conceptual models regarding what you think is going on, what the resources concerned are, how they come in contact with the

stress, what mechanism is involved that Neville mentioned, by which these resources are actually affected by that stress.

And really I think from the standpoint of engineering, it's more than just defining how you can modify the project to reduce turbidity. It's really looking to our engineers to help us to find what this exposure level is like.

So, it's not just how can you modify your project. Tell me what the concentration of this stress is in the environment. And so then if you have both of those, you're actually in a position to actually do the analysis.

And it's as parallel as anything can be to what has been done in this country for more than 20 years now, using environmental risk assessments to make decisions. I mean you also have to have all these stakeholders and everything.

So, I'm really talking about something that's really an analysis framework more than maybe a decision making framework, but I think they're complimentary.

MR. WAKEMAN: Thank you, Todd. An analysis framework is something we probably can tackle. Decision making framework almost requires you know who the people are at the table and where they're coming from at the time.

Joedy Cambridge happens to be here from the National Academy. And Joedy has shepherded a lot of projects through and is familiar with this one. Would you say a few words about where you think the academy might be at this point with respect to a follow-up to the earlier workshop that they hosted?

MS. CAMBRIDGE: Well, let me just say we have the documents. The second is Phase II of this, looking at the implementation. We had some preliminary discussions with people at the Corps of Engineers' headquarters as well as folks down here.

Tom and Ellen and I met with the head of our policy division just a few weeks ago to talk about this. And there are different approaches that we feel could be taken on this. One might be to do some sort of a larger national-type symposium to put some of these issues out on the table. We could convene a full NRC study committee and do a formal Phase II like what Jerry did.

There are a lot of different approaches, but obviously we need some support to go about this. I think we've had a couple of volunteers in terms of doing some case studies on this.

I'd also like to say that anybody who's interested in seeing the report who hasn't already gotten a copy, give me a card and I will send you a hard copy of it. Otherwise, it is accessible from our web site. If you go to [TRB.org](http://TRB.org) and click on marine board, you'll get direct access to the report from there. But we're certainly here standing ready and are certainly prepared to go on with another phase on this.



And I have to say just from experience in the last few months, the NRC has speeded up some of its processes. And by doing the phase II doesn't necessarily mean that we're going to be two years farther out on this whole thing before we look at how this could be implemented. We've got strategies and approaches that we can take to some of these things that could certainly shorten that time frame considerably and hopefully we can consider that.

MR. WAKEMAN: Thank you.

MR. CALLAGERY: My name is Bob Callagery. I worked in the Corps for many years and retired recently, and I worked in the Philadelphia district. And now I work with Cohagen and Bryan. And I just want to go back to a point that the gentleman from England brought up. Whenever you bring people in the room, it's very, very critical. And I'm an economist, so I'm going to talk the way an economist talks.

People have different objective functions, and it's very, very critical that you figure out a way to get everyone to recognize they're going to have to suboptimize. People are going to have to give up something in order for everyone in the room to go forward together. And until we can get people to acknowledge the need to go forward on all fronts, not just to protect the environment or not just to dredge, it's very, very difficult to get these processes to lead you to a conclusion.

And you may run into "there's never enough science." When I was in Philadelphia, we had more dredging windows probably than this building. We had windows for anadromous fish and for oysters. We had windows for turtles. We had windows for sturgeon. We had windows for winter flounder. They were all there.

And every time we attempted to convene people and work, we might be able to get a specific window adjusted, a window for sturgeon or a window for this. But in the overall context of dredging, we could never get everyone together and say all right, we all acknowledge that dredging has to go forward. How can we now sit down and look at our mandate, which is to protect the environment and figure out a way to compromise that? And that's a very, very difficult thing.

I'm hopeful that these processes might help, but I think you've got to get back to making need a critical part and acknowledgment of everybody in the process.

MR. WAKEMAN: Peg is very familiar with the Columbia River and the things that are occurring on the Columbia River. Would you make a few comments, please? Introduce yourself and make a few comments about how a template as Todd described might be useful to you or not.

MS. JOHNSON: I'm Peg Johnson. Well, I really agree with Mr. Schubel about this being a social process. I think it's long overdue that we recognize that. And I kind of like the whole social process thing better than the political process.

I am concerned as I sit here about pilot programs, with all due respect, Ellen. Ellen is my esteemed colleague because of what we saw at the very beginning today. And I don't remember if it was Doug or it might have been Sye who talked about the infinite variables in a system and the different parts of the estuary, and I think Sye said he's going to represent the fish.

And I thought well, you know, what if the mackerel decided it was going to represent all the tall 50 year old women with brown hair, you know. I wouldn't want that either.

So, I guess I'm just worried we keep looking for definitive answers in science that we can take to the public and say well, this is what happens. But all we can do, even with the best models and the best science is make some half good guess at what a fish or dredge sediment or anything might do at any given time. I do believe it's a process, the success of which is going to hinge more on consensus and social interaction, political interaction, and giving. We've got to understand that it's really important to build those estuaries back, you know. Those are really important, and we're all environmentalists.

MR. WAKEMAN: Thank you, Peg. Anybody else? Well, I'm not one to sit and look at one another. If there's nothing else to be said, I'll give our president the last shot.

MR. EEDE: I'm presently the President of PIANC. Of course, I fully back Neville. I want to say, those windows, they look like a pretty simple idea, but in my opinion simple ideas often result in difficult situations, and this is what is going on here in the U.S.

From my perspective in my country in Belgium, the only windows we have nowadays are windows that are now installed due to environmental facts, and due to the fact that recreational navigation should go undisturbed by dredging. So, I hope we can keep it this way and even look back from that. So, thank you.

MR. WAKEMAN: I'd like to thank all the panelists and thank you for sitting with us and sharing your time. This dialogue will continue. And it's been a pleasure this morning to find a group of people that are willing to sit and talk when it's not a crisis at the moment.

It seems too much of our decision making is done under those circumstances. I am a supporter of a new wave of NRC work. And the Port Authority of New York and New Jersey, as long as they don't take the money that's currently earmarked for that and ship it to lower Manhattan, would be willing to support another round.

And I think more along the lines that Todd was talking, of a template, an analysis template that allows us to organize the data and identify where the data gaps are and allow people to see how the decision making, the process works.

Right now, too much of it is very ephemeral. And if you don't know what happened that day in the room, you don't know how you got the decision. And then when

we try to replicate that later on, we have to start all over again, and it takes months. So with that, thank you for being another iteration in this ongoing dialogue. And thank you, Mr. Izzo, for joining us as well.

